Atty. Dkt. No. 034827-3901

AMENDMENT TO THE SPECIFICATION

Please amend paragraph [0009] of the specification as follows:

[0009] A "capture moiety" refers to a portion of a molecule that can be used to separate the molecule from a solution. Thus, a moiety that has a binding affinity for another molecule can be a capture moiety. The binding affinity need only be sufficient to collect the capture moiety (and consequently the molecular structure or complex attached to it) from a solution. Suitable capture moieties include, but are not limited to, biotin, streptavidin, streptavidin agarose, digoxigenin, and various fluorescent compounds such as, for example, fluorescein and 5(6)-carboxy- fluorescein-N-hydroxysuccinimide ester (FLUOS), rhodamine, aminomethylcoumarin acetic acid, cyanine dyes (e.g., Cy3), and commercially available products such as ~~CaptAvidin™~~ CAPTAVIDIN™ agarose (Molecular Probes, Eugene, OR), ~~Captivate™~~ CAPTIVATE™ ferrofluid magnetic particles (Molecular Probes, Eugene, OR). In one embodiment the capture moiety is a molecule that can be bound by an antibody. The capture moiety can also be a particle or portion of a molecule that is pulled from solution by a force such as a magnetic attraction. For example, the capture moiety can be a magnetic micro-bead or a molecule attached to a micro-bead. The molecular structure or complex can be separable from the reaction mixture through the capture moiety. Thus, in one embodiment the capture moiety is biotin, which can be removed from solution by contacting the reaction mixture with magnetic particles coated with streptavidin. After mixing, the magnetic particles are separated from the solution and the quantity of signal present on the magnetic particles determined.

Please amend paragraph [0012] of the specification as follows:

[0012] In another embodiment the method further involves separating the molecular structure or complex from the sample before generating the detectable signal. The separation can be performed by utilizing the capture moiety contained in the molecular structure. For example, when the capture moiety is biotin that has been attached to a deoxynucleotide triphosphate that is incorporated within the molecular structure or complex, the molecular structure or complex can

be separated from the reaction mixture by contacting the reaction mixture with avidin immobilized on a surface of a solid phase. Alternatively, streptavidin, streptavidin agarose, ~~CaptAvidin™~~ CAPTAVIDIN™ agarose (Molecular Probes, Eugene, OR), ~~Captivate™~~ CAPTIVATE™ ferrofluid magnetic particles (Molecular Probes, Eugene, OR), can also be used to remove the biotinylated molecular structure or complex from the reaction mixture. Any other capture moiety can be used, as long as it can be removed from the reaction mixture or at least isolated within the reaction mixture. Of course, any of the above molecules can be used as the capture moiety and removed with a corresponding molecule having affinity for the capture moiety. In other embodiments the molecular structure can be removed from the reaction mixture by chromatographic methods, such as gel filtration (or "size exclusion") chromatography.

Please amend paragraph [0057] of the specification as follows:

[0057] Upon incubation at 37°C in a sealed reaction vial for appropriate length of time, 5μL of 0.2 M EDTA was added at 0°C to stop the assay mixture. The assay mixture was then brought to room temperature, and allowed to stand for 5 min. To 20 μL of magnetic particles (coated with streptavidin) at 2.0 mg/mL in water were added 50 μL of the assay mixture, followed by incubation at room temperature for 5 min. Magnetic separation was applied and the supernatant was removed. The particles were rinsed 3 times with 1 mL of ~~Nichols Advantage®~~ NICHOLS ADVANTAGE® (Quest Diagnostics, Teterboro, NJ) assay wash concentrate. Deionized water (25 μL) was added to the particles. Relative luminescence unit (RLU) was finally measured for 2 seconds upon triggering the particles with a dilute acid and basic hydrogen peroxide. The data are summarized in following table, and are graphically illustrated in Figure 2.